

**4 Corners Air Quality Task Force
Power Plant Workgroup
November 8, 2006**

Joint Session with Other Sources Workgroup

Participants: Rita Trujillo, NMED-AQB; Mark Jones, NMED-AQB; Jeanne Hoadley, USDA Forest Service; Susan Johnson, NPS; Kim Livo, CDPHE; Carol Harkins, NMED-AQB; Nathan Plagens, Sithe Global; David LeMoine, Citizen; Jack Schuenemeyer, Southwest Statistical Consulting; Richard Grimes, APS; Carla Sonntag, NMUSA; Sug McNall, Citizen; Kelly Palmer, Forest Service/BLM; Don Anderson, Citizen; Marilyn Brown, LWV La Plata County; Lee Conger, LWV Durango; Bev Warburton, Citizen; Wilson Laughter, Navajo Nation EPA; Isabella Johnson, Sierra Club; Orion Yazzie, Dine Care; Mike Farley, PNM; Maureen Gannon, PNM; Mike D'Antonio, PNM; Stacey Simms, American Lung Association of Colorado & Denver Clean Cities; Louise Martinez, NMEMRD

Presentation:

Renewable Energy Louise Martinez, Bureau Chief, Energy Efficiency Program

Mike already discussed (in plenary) much of what she was going to discuss. Discussed NM as leader in energy initiatives. Renewable energy, renewable fuels (including hydrogen). Best wind energy in eastern plains NM; is intermittent. Solar resource strong all over state. NM has solar tax credits for residential solar projects (as does federal government (via tax return) and PNM).

Efficient Use of Energy Act, Renewable Energy Revenue Bonds Act allows public buildings to retrofit and pay back bonds through energy savings

Clean Energy Grant Program to public entities (local, state, tribal)

Solar Market Development Income Tax Credit—PV and Solar Thermal

NM PUC net metering rule

“Clean Energy State” initiated task forces, GHG target, declining CO₂ emissions; 1st state to join Chicago exchange. NM working on biodeisel. Next legislative session: push for renewable transmission authority; NM will have excess renewable energy at some point. California will be adding 2000 mw in next 15 years (between retirements and load growth).

PNM service—115 smaller PVs = 171 kw or 40k kw/year. (residential)

Q: other incentives for solar residential? A: we would welcome ideas to help indiv. Residential. Constitution prevents providing grants to individuals for private gain. Big push is try to promote energy efficiency—has immediate payback vs costly investment in solar.

Idea: building law specifying capture of winter sun (passive solar).

Richardson: state buildings to be 50% more efficient.

Q: has utility surveyed public to see what they would be willing to pay for energy/clean environment? A: positive responses to solar until investing/following through (ie, evidently there is elasticity regarding what public willing to pay). Low income people—can't pay as much.

Costs for energy types didn't include environmental costs. But we need to meet reliability needs we have today.

NM is keeping natural gas infrastructure to accommodate hydrogen economy, but it is an investment. Investment has to be worth it.

Q: is there state incentive to build infrastructure? eg. E-85? A: task force is recommending 30% capital cost tax incentive (via House Memorial). Q: is there a personal tax incentive A: tax deduction (excise) for hybrid vehicles.

Comment: what about distributed energy vs transmission difficulties. A: biomass projects are local—eg, one school saved 35k/yr (Jemez). Other biomass heating facilities considered. Dairy biomass being considered to produce methane and fertilizer. Landfills—methane to power microturbines (for balloon fiesta)—a demonstration project. Wastewater systems being considered as well.

Conclusions: NM has comprehensive set of strategies for renewable energy incentives, world class resources, political commitment

Joint Mitigation Options (Power Plant and Other Sources Workgroups) on Renewable Energy/Energy Efficiency

Q: does Farmington Electric have RPS? A: not mandatory for coops or municipalities.

Potential Mitigation Options:

- 1) Expand RPS to mandatory for coops and municipalities (not just investor-owned). Rural coops wanted to protect customer rates. Would need incentives. State production tax credit for capital costs for solar. There is a .01 production tax credit now—but that wouldn't bring costs down much. Also address Colorado (PNM—Mike and Maureen, Mark McMillan? HM 49 (2004) and accompanying report looked at this)
- 2) Building standards for commercial and residential. “Energy 10” software developed by NREL to turn building specs into energy efficient. NM energy office has green building program—there are tools with EPA (energy star) available for use by consumers. LEED certification for buildings (can be costly). Even consideration of these standards would be helpful. Habitat for humanity. (Stacy, Bev and Wilson)
- 3) Conservation/outreach—why aren't we looking at this more? Energy efficiency is more desirable – “conservation” implies personal sacrifice. Could option be public outreach

campaign around conservation? Canada tried this—people really don't sacrifice unless there's \$ incentive. NM does have a public campaign—benefits of conserving energy, because behavior is crucial for wise use of energy. That office would like to work on this in 4C area. Promotion of college energy programs (local colleges). Maybe utilities can do campaign—where they tell consumers how much \$ a reduction of KW hours would be (Jack). (Sug and Mark)

- 4) Communicate potential cost savings through energy bills. Utility bill inserts to show savings if less electricity was used / Other utility bill additions to educate consumer? (Jack)
- 5) Corporate: eg, free electric mowers in exchange for gas; insulation retrofitting, home audits for weatherization (below) (this could go in building standards).
- 6) Private property prices for project development? Subsidization of land. Would need 5 acres per MW for solar. Would this be a project for BLM land? A: leasing for that use could happen. Mitigation here would be how to reduce barriers. Q: has NN thought of renewables? A: tribe has been interested in studying renewable resources out there. 2 wind projects being considered on AZ side. (Nathan, Mark)
- 7) Clean coal technology incentives would help maintain the economic viability of area. Feasibility studies, cost recovery, like in Colorado. DOE has incentive program (Isabella Johnson)

Comment: our air is foul because of coal economy for energy that is exported. This area is known as the "sacrifice area." Retrofit at SJGS being paid by all users? Yes, costs are paid by all investors and get recovery later on.

- 8) California companies can only purchase clean power. We could ask other states to do this. (Marilyn and Don)

Comment: companies can buy right to pollute. A: more complicated. Standards are currently met, PSD is supposed to protect these areas.

Q: Oil and Gas requirements? A: yes, we are considering in this TF.

- 9) Other states should follow NM with energy efforts (RE tax credits, RPS, Net metering. Ie, Colorado had amendment 37. Tax credits for renewable energy (Kelly)

Q: where are UT and AZ? A: they do participate (they are watching). WY and MT are watching this too. Q: will we have a follow-up to this TF? A: we should have a followup to see where the agencies are on this.

- 10) Distributed energy/Off-grid (Marilyn)

- 11) Working on pilot project to work locally/neighborhood level to change behavior re energy use (Gordon)
- 12) What about water structure—where usage over a certain amount is charged a higher rate. OR, rate decreases could be at lower usage, so an increase could be earlier on. Time of day/use of power (Marilyn and Gordon and PNM)
- 13) Audits of low income areas to find simple solutions. Farmington had “make a difference day” at college, where they went to 10 homes with weatherization checklist. Could utilities promote this? In Colorado, volunteers of America do this after a 5-hr training. (Stacy and Mark)

Power Plant Workgroup

The next round of papers and reviews will be due 12/15. Next report ready by 2/7 meeting.

Call schedule:

11/29 4:00 pm

12/13 4:00 pm

1/10 4:00 pm

It was suggested we try and get representatives from the cities of Farmington and Aztec. Mark will outreach to cities and counties.

Members need to review draft report. Pay particular attention to power plant options and how they are organized. Please read review guidelines. If possible, cut and paste individual options to review, make edits in red. Do reviews however you can. Some members would like to see interim deadlines and reminders for reviews.

Additional power plant options to be completed by 12/15:

- 1) Emission Reduction Fund (Susan, Jack)
- 2) Mercury Control Retrofit (Mark McMillan)
- 3) Mercury Studies (Mark, Koren, Sug)
- 4) Baghouse for PM (Mark, Mike)
- 5) EPA regional coordination on 4C issues (Marilyn, Susan) Mark will seek EPA input as well.